

# WP1 report, period M1- M9

AGA 2, 11 February 2016

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# WP1 Report, ASTERICS AGA 2, 11 February 2016

This report describes the ASTERICS WP1 Management plan and execution of the plan during M1-M9 (1 May 2015 – 31 January 2016), including the encountered challenges and a brief overview of the priorities in the next period.

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## Project start

The Project started on 1 May 2015. At the coordinating organisation, ASTRON, the project manager and the project administrative office had a running start as they were involved in the preparations of the ASTERICS proposal.

WP1 is divided in three main tasks to manage all aspect of the project

- project governance
- project coordination
- project management

The first major task was to prepare the Kick-off meeting on 26 and 27 May at ASTRON, Dwingeloo, <https://indico.astron.nl/conferenceDisplay.py?confId=9> and <http://www.astron.nl/asterickickoff2015/>, where 44 participants registered and participated to the meeting. The first day of the Kick-off meeting was set up to inform the participants of the proposed plans in the project and work packages. After that, there was time for the first face-to-face meetings, to discuss the detailed plans and communication on the first activities.

## Project governance

The second day of kick-off meeting was the first General Assembly meeting, where the governance structure for the project was confirmed:

- ASTERICS General Assembly (AGA), consisting of representatives of the consortium parties. The representatives can be changed by the partner institutes if required.
- ASTERICS coordinator, Mike Garrett, director of the coordinating organization, ASTRON.
- ASTERICS Executive Board (AEB), consisting of the WP leaders.
- ASTERICS Management Support Team (AMST), consisting at that time only of the project manager and the project administrative officer.  
The AMST was extended with a project scientist on 1 July 2015.
- ASTERICS External Advisory Board (AEAB).  
Plans for the scope of the AEAB and who should be invited to take a seat in the board were discussed during the meeting. The AEAB would have its first meeting at the second AGA meeting, in early 2016.  
The first AEAB meeting is indeed scheduled in parallel with the AGA meeting in February 2016.

Administrative tasks connected to the governing bodies above were planned as:

- organise, prepare and minute meetings of the AGA, AEB, AMST and AEAB;
- oversee the implementation of the decisions of the AGA and AEB, and the advice of the AEAB;

- update and maintain the Consortium Agreement;

These tasks were performed as planned. Minutes of the meetings are stored on the Indico meeting pages. Layered access control will make this information easily available for the AGA, project participants and public in the near future.

## Consortium agreement

At the time of the first AGA meeting, there were some differences between the wishes from some partners on the contents of the consortium agreement. These have been straightened out over the summer. The consortium agreement final draft was distributed early September. There were still some minor changes towards the final version, which was distributed for signing on 15 October. The last signature arrived on 6 January 2016. The full version with scanned signatures was distributed shortly after.

The coordinator and GTD will sign the accession form for GTD once the amendment (later in this report) has been approved by the EC.

## Project coordination

The tasks connected to the project coordination were described in the proposal and shown below. The tasks performed over the first period are indicated.

- *“Develop a close-knit network of intra-project communication channels between all WPs, the AMST and the AEB.”*
  - There is a good routine of communication within the AEB. There is a formal (telecon) meeting every two months, with agenda on Indico. The meetings are prepared and chaired by the project manager. There are formal minutes and an action list. In between meetings the communication is mostly by email or telephone.
  - Communication between WPs is not formalized in meetings. The WP leaders and task leaders within the work packages know what overlap exists and what communication is required. Results are presented in the AEB reports.
  - The close-knit network is developed and will be monitored in the next period.
- *“Ensure close cooperation with the various astronomical ESFRI projects, and direct engagement with senior figures in their central organisations.”*
  - The four ESFRI infrastructures involved on the project have high level representatives in the AGA. Other levels are represented in the work packages, through the institutes executing the project actions.
  - The close cooperation is established and will be monitored in the next period.

- *“Foster cooperation with all relevant organisations, including other EC projects (e.g. ASTRONET, APPEC, RadioNet, OPTICON, Europlanet, SOLARNET etc), industrial stakeholders, other research infrastructures, national funding agencies, etc.”*
  - ASTRONET and APPEC have a high level representative in the AGA.
  - A complete inventory of the relevant organisations is part of the execution of the collaboration plan.
  
- *“Visibly promote ASTERICS to the global, European and national communities by attending relevant meetings (e.g. IAU General Assembly, EWASS, Big Data gatherings with industry and SMEs) and making high quality presentations.”*
  - A standard presentation on the ASTERICS plan was created at the start of the project for all partners to use to promote ASTERICS.
  - ASTERICS was promoted at various conferences, workshops and meetings by members of the AEB, AGA, and AMST.  
The presentations are listed in Indico. A full overview of the presentations will be made available on the ASTERICS website.
  
- *“Establish and run a vibrant Policy Forum for the ESFRI and other related astronomy facilities, in order to coordinate joint actions (e.g. interoperability, commensal observations etc.) and discuss general policy matters of common and general interest.”*
  - A Policy Forum group is constructed to organize the Forum. This group had its first meeting by telecom in November. An extended group will meet parallel to the AGA meeting and the results of this meeting will be shared with the AGA at the end of the AGA meeting.
  
- *“A grand Integrating Event will be held to showcase the final results of the ASTERICS project and engage with all relevant stakeholders.”*
  - The preparation of this event will use results of the exploitation plan.

## Project Management

The tasks connected to the project management were described in the proposal and shown below. Details of the tasks performed over the first period are indicated.

- *“Distribute EC funding to the partners based on the Horizon 2020 rules and the Consortium Agreement.”*
  - The pre-financing was distributed on time. The prefinancing of GTD, third party of IEEC could not be forwarded from IEEC to GTD without paying VAT according to Spanish tax rules. Therefore it was decided to start an amendment to change the position of GTD from third party to full beneficiary to the project. The prefinancing for GTD has been returned by IEEC to ASTRON and is waiting for the approval of the amendment by the EC before the money can be transferred to GTD.

- *“Maintain a broad overview of the ASTERICS project in terms of overall staff effort, including subcontractors.”*
  - A broad overview of the ASTERICS project in terms of overall staff is created from the input by the WP leaders and once per half year from the partners. The first half year the project was understaffed due to late hiring.
  
- *“Implement appropriate and transparent reporting structures within and between the various WPs.”*
  - Every two months the WP leader provide a short report on the work in the WP for the AEB meeting. These reports are stored on the agenda pages of the corresponding meetings.
  - Within WP1, the AMST reports and meets each week. There are only action items recorded of these meetings.
  
- *“Monitor milestones and deliverables, chasing any outstanding actions/deadlines.”*
  - Milestones and deliverables are monitored. The relevant parties are reminded of upcoming milestones and deliverables and when completed these are submitted to the EC via the project continuous reporting portal.
  - The deliverables of WP4 are mainly meetings. These meetings are organized before or close to the deadline of the deliverable. The date is recorded on the project portal. The report follows in the weeks after the meeting and is submitted later. This is agreed with the project officer.
  
- *“Prepare, compile and generate all relevant project reports (including financial data) for all major external and internal stakeholders (e.g. the EC, AGA, AEB etc).”*
  - All WP leaders have generated a 9 month intermediate report for the AGA meeting. The formal periodic report at M18 will be prepared along strict guidelines from the EC. We will plan early deadlines to be able to hold internal reviews before submitting the reports to the EC.
  
- *“Generate an Exploitation plan – a dedicated plan will be generated to ensure the early identification of both high-impact ASTERICS technologies, IPR foreground or patent restrictions, and appropriate (industrial) target sectors. Exploitation events will be organised during major conferences and corporate events, in order to engage with potential industrial interests, backed up with printed materials, and conceptual demos. Actions to ensure the long-term and sustainable exploitation of the project beyond its formal contract duration will be identified and executed. This will include the Data Management Plan that addresses all aspects of ASTERICS dissemination activities.”*
  - The Exploitation plan was finished in September and submitted as deliverable to the reporting portal.

- The execution of the plan has been started with brainstorming sessions. The plan and further execution will be discussed separately during the AGA meeting.
- *“Generate a Collaboration plan – a central plank of our strategy will be to seek links and interactions with other projects (including other EC-funded projects), industries, research organisations etc. in order to broaden our knowledge base and to find opportunities to show-case our results/products.”*
  - The Collaboration plan was finished in September and submitted as deliverable to the reporting portal.
  - The execution of the plan has been started with brainstorming sessions. The plan and further execution will be discussed separately during the AGA meeting.
- *“Establish, maintain and update the:*
  - *central risk register, incl. entries for contingency and risk mitigation,*
  - *Intellectual Property (IP) register,*
  - *list of all publications, open source software contributions and other ASTERICS products,*
  - *global registry of ASTERICS partners, third parties, subcontractors, industry contacts and SMEs.”*

These registers will be stored on the project website and open to at least the project partners. An overview of important changes and issues in these will be presented in the periodic reports.

- At the moment these registers are not on-line. Once the access control of the project communication tools is fully operational, the registers will be made available on-line.
- The input to the registers will be monitored more closely in the next period and the registers will be updated when needed.
- There are no important changes and issues to be presented.
- There is one upcoming change, when GTD officially changes from third party to full beneficiary.

## Milestones and Deliverables

The deliverables and Milestones from the first 9 months are listed in table 1 and 2.

Number	promised	submitted	accepted	name
D1.1	1 Oct 2015	2 Oct 2015	17 Dec 2015	Exploitation Plan
D1.2	1 Oct 2015	2 Oct 2015	17 Dec 2015	Collaboration Plan
D2.1	1 Aug 2015	30 Jul 2015	17 Dec 2015	ASTERICS project website live
D3.1	1 Sep 2015	31 Aug 2015	17 Dec 2015	Detailed WP3 project plan
D4.1	1 Oct 2015	3 Nov 2015	–	First ASTERICS DADI technology forum
D4.2	1 Dec 2015	internal review		
D4.3	1 Dec 2015	internal review		

*Table 1 ASTERICS Deliverables from the first 9 months of the project.*

Number	promised	delivery date	WP	name
M1	1 Jun 2015	26 May 2015	WP1	Project Kick-Off meeting
M2	1 Jul 2015	19 Jun 2015	WP4	Presentation of progress and results and discussion of priorities at IVOA(1)
M3	1 Aug 2015	1 Jul 2015	WP1	1st AGA meeting Governance entities (e.g. AEB, AEAB) and AMST fully appointed
M4	1 Nov 2015	31 Aug 2015	WP1	1st ASTERICS Policy Forum group meeting
M5	1 Nov 2015	1 Nov 2015	WP4	Progress and priorities at IVOA (2)

*Table 2 ASTERICS Milestones from the first 9 months of the project.*

## Project communication tools

The plan was to have a set of integrated communications tool only a few months into the project. Due to unforeseen delays, the integration is not completed. The tools available at the moment are:

- Wiki
- Website
- Forum
- Mailman (mailing lists)
- Indico (meeting manager)

The first three can be accessed with a single account. The others will be integrated soon.



The wiki is well used by the various work packages for internal communication. WP4 also uses the wiki successfully for the schools and workshops.

The Website contains basic project information at the moment. This will be extended once the first results from the project start emerging. Based on the results from the exploitation plan, we will create different sections, targeting different audience after we have determined our target audiences and the best way to disseminate information to them.

## Communication with the EC

The EC project officer (PO) is Mrs. Keji Alex Adunmo. Communication with her is very good and productive. We had a successful face-to-face meeting on 1 July 2015 to discuss expectations and learn each other's assumptions.

Project technical communication operates via the continuous reporting on the EC portal. The portal seems to work good on most occasions, but with the amendment we had many unfortunate issues. We were one of the first to use the on-line amendment system. The PO had warned us for that. The helpdesk had to fix bugs and change settings multiple times, before we could submit the amendment. We assumed it would be as simple as flipping a switch to go from third party to full beneficiary while leaving all other information the same. Actually it is much more difficult for the system than to bring in a new partner.

## Project Amendment

An amendment was initiated because GTD, third party to IEEC, could not receive the prefinancing for the project from IEEC without paying VAT on it in Spain. As a full beneficiary to the project, no VAT has to be paid on the project financing.

The AGA and partner project contacts were informed about the Amendment at the end of July. We started the amendment on the EC portal on 18 August. Since then many issues, mainly with the EC system have been settled. It seems the last one was solved last week. We hope to welcome GTD as a full beneficiary in the near future. The web portal now states March 24<sup>th</sup> as the final decision date.

As soon as this is approved by the EC, GTD and the coordinator will sign an accession form for GTD to join the consortium.

## Project financial report

All partners were asked on 1 November to provide the financial status at 6 months into the project. Information from most partners was received and collected into a report before Christmas. The last report was received in February.

The consolidated results are displayed in the graphs and tables below. The conclusion from this information is that most partners have not spent the full budget for the first six months. Asked for an explanation, most indicate problems with hiring or with starting up hiring for the

project as the cause of this underspending. We should see a return to the projected linear spending profile in the next months. If we continue profiling with a linear spending profile, we will underspend for the whole project. Therefore all partners should plan for how to change the spending profile. A solution needs to be presented at the Periodic Review in M18.

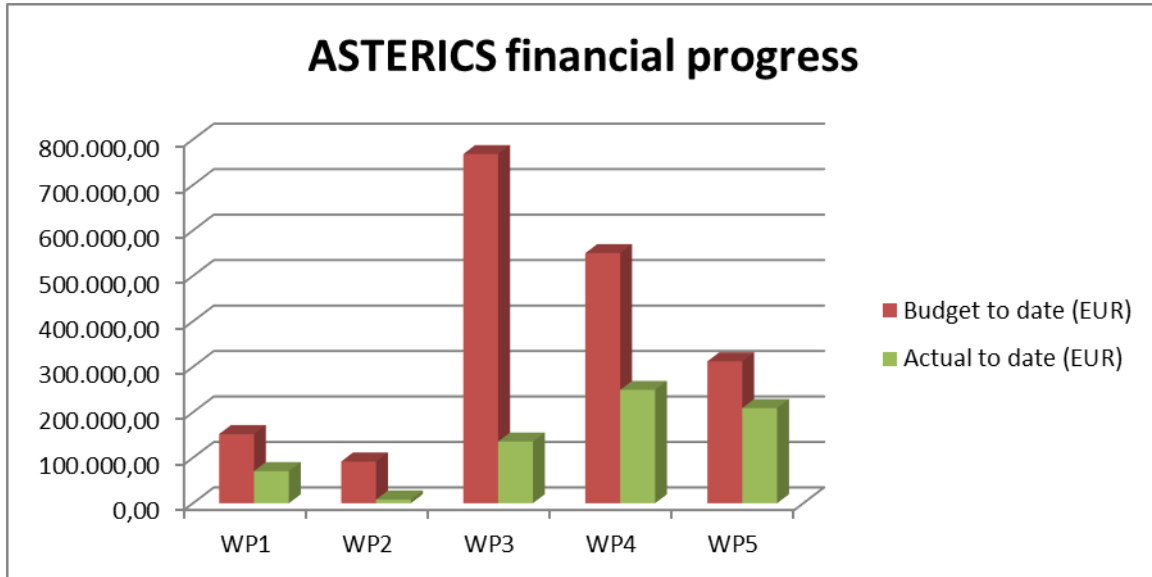


Figure 1 Financial progress in the first 6 months of the ASTERICS project. Both the linear projected budget and the actual expenditure for 6 months are presented.

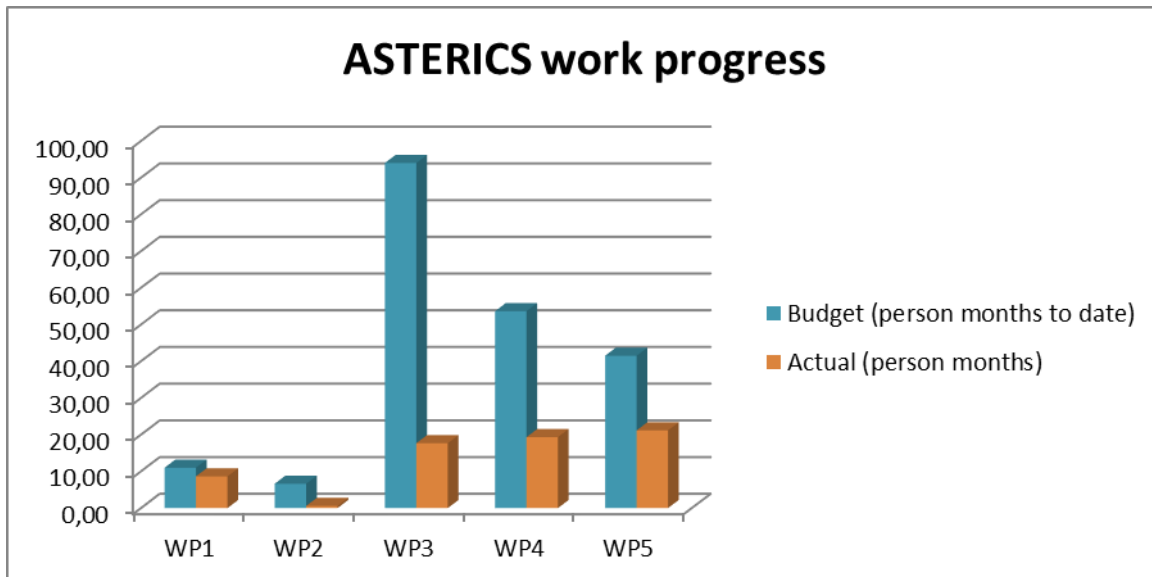


Figure 2 Work progress in the first 6 months of the ASTERICS project. Both the linear projected person months and the actual worked person months for 6 months are presented

## Notes on the financial figures:

- The Budget is recalculated to 6 project months (6/48 of total budget), to show the difference between the actual and expected progress up to month 6.
- Some partners had no costs to report:
  - FAU (starts Q1-16),
  - INFN (started Nov-15),
  - IEEC (starts Dec-15),
  - CEA (started Nov-15),
  - DESY (starts Q1-16),
  - UvA (starts Q1-16)

Figures 1 and 2 are based on the numbers from table 3.

Based on progress at month:	6				
Workpackage	WP1	WP2	WP3	WP4	WP5
Budget total (EUR)	1.216.795,00	733.221,50	6.143.415,00	4.402.125,00	2.495.637,50
Budget to date (EUR)	152.099,38	91.652,69	767.926,88	550.265,63	311.954,69
Actual to date (EUR)	70.516,21	8.044,33	135.646,95	249.193,86	209.247,83
Budget total (months)	88,00	53,00	752,00	429,00	332,00
Budget (person months to date)	11,00	6,63	94,00	53,63	41,50
Actual (person months)	8,65	0,59	17,66	19,33	21,16

*Table 3 Overview of the financial and work progress in the first 6 months of the ASTERICS project. The total budget, the linear projection for six months, and the actual work and expenditure for 6 months are given.*

The detailed financial information is provided in the tables in Appendix 1.

## Challenges, Difficulties and Risks

There were some challenges in the first months of the project.

- Finishing the Consortium Agreement was a challenge as this was low on the agenda of some partners. For easy convergence of the text, we had chosen in the proposal for the DESCAs model. Despite the work many institutes in Europe put in creating a template that should work for most projects some partners requested many detailed changes to some parts of the text. Some partners were very easy, they confirmed proposed changes within hours. Some other partners only woke up when the final version was distributed and even requested changes when most of the other partners already signed.
- The administrative work on the amendment was incredibly difficult, due to the way the EC portal was working. Either in the reasoning before, or in translation to code for the portal, some strange decisions were taken, making it a long process involving the EC helpdesk chasing bugs and changing settings to make us progress. The amendment has been submitted now, after the PO informed us the information we provided was complete. We are now confident we are only waiting for the review and decision of the EC.
- For the project communication tools we wanted to make it easy for all participants to the project to be able to connect to all tools with one account. On paper this is possible, but in practice there were some issues that not all have been solved. Most of the necessary tools work and the integration will follow soon.
- It took some persuasion from the AMST to receive all financial overviews, describing the expenditure over the first six months of the project. Although some partners were reluctant to collect the information, most delivered within six weeks.
- With the reports already in the summer that hiring new personnel was slow in some organisations, we realised that underspending of the budget would happen. Most organisations now have people in place or they will start soon. There is still the risk of underspending for the whole project. In the next months the individual projected spending profiles will be studied and corrective actions will be planned if required. The results will be presented at the Periodic Review in M18.

## Plan for the next 9 months

### Deliverables

There are no deliverables for WP1 in the next nine months. The next deliverables are for Month 23, update of execution and collaboration plan.

### Milestones

There is one Milestone at M12.

Number	promised	delivery date	WP	name
M6	1 May 2016	--	WP1	1st AEAB evaluation + Acceptance of annual reports

The question now is, how to treat this Milestone? There are progress reports at 9 months, there is a financial report over 6 months. The AEAB and the AGA are meeting in month 10. Do we consider this Milestone completed:

- with the current information?
- with the financial report over 12 months?
- with the financial report + progress report over 12 months?

Should the AGA and or AEAB convene for another review?

### Periodic review

In the next nine months we will prepare the first Periodic Report to the EC with a formal review. The 18 months period ends on 31 October 2016. The periodic report and Form C's have to be submitted before 31 December 2016. The review will most likely be in January 2017. We will contact the EC for their planning and inform the project partners.

## Appendix 1

### Total financial overview in numbers

Total overview per work package						
	Budget					
	WP1	WP2	WP3	WP4	WP5	Total budget
	Management	Outreach	Data	Data Access	Joint S&T	
Man months	88,00	53,00	752,00	429,00	332,00	1.654,00
<b>(A) Direct personnel costs</b>	<b>733.436,00</b>	<b>315.808,00</b>	<b>4.006.732,00</b>	<b>2.627.500,00</b>	<b>1.804.830,00</b>	<b>9.488.306,00</b>
No of trips	32,00	8,00	0,00	0,00	64,00	104,00
Travel cost	90.000,00	49.329,68	441.000,00	656.200,00	31.680,00	1.268.209,68
Equipment	0,00	10.000,00	0,00	0,00	160.000,00	170.000,00
Materials	0,00	48.217,69	0,00	0,00	0,00	48.217,69
Other	150.000,00	105.510,63	195.000,00	18.000,00	0,00	468.510,63
<b>(B) Other direct costs</b>	<b>240.000,00</b>	<b>213.058,00</b>	<b>636.000,00</b>	<b>674.200,00</b>	<b>191.680,00</b>	<b>1.954.938,00</b>
<b>(E) In kind contributions (not used on the premises)</b>	<b>0,00</b>	<b>72.139,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>72.139,00</b>
<b>(F) Indirect costs</b>	<b>243.359,00</b>	<b>132.216,50</b>	<b>1.160.683,00</b>	<b>825.425,00</b>	<b>499.127,50</b>	<b>2.860.811,00</b>
<b>Subtotal</b>	<b>1.216.795,00</b>	<b>733.221,50</b>	<b>5.803.415,00</b>	<b>4.127.125,00</b>	<b>2.495.637,50</b>	<b>14.376.194,00</b>
Sub-contract	0,00	0,00	340.000,00	0,00	0,00	340.000,00
<b>(C) Subcontracting</b>	<b>0,00</b>	<b>0,00</b>	<b>340.000,00</b>	<b>0,00</b>	<b>0,00</b>	<b>340.000,00</b>
<b>(D) Financial support 3rd parties</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>275.000,00</b>	<b>0,00</b>	<b>275.000,00</b>
<b>(H) Total estimated eligible costs</b>	<b>1.216.795,00</b>	<b>733.221,50</b>	<b>6.143.415,00</b>	<b>4.402.125,00</b>	<b>2.495.637,50</b>	<b>14.991.194,00</b>
<b>(J) Maximum grant</b>	<b>1.216.795,00</b>	<b>733.221,50</b>	<b>6.143.415,00</b>	<b>4.402.125,00</b>	<b>2.495.637,50</b>	<b>14.991.194,00</b>
<b>(K) Requested grant</b>	<b>1.216.795,00</b>	<b>733.221,50</b>	<b>6.143.415,00</b>	<b>4.402.125,00</b>	<b>2.495.637,50</b>	<b>14.991.194,00</b>
	Actuals					
	WP1	WP2	WP3	WP4	WP5	Total actuals
	Management	Outreach	Data	Data Access	Joint S&T	
<b>Labour rate</b>						
Man months	8,65	0,59	17,66	19,33	21,16	67,39
<b>(A) Direct personnel costs</b>	<b>47.813,23</b>	<b>4.889,71</b>	<b>103.520,08</b>	<b>126.557,64</b>	<b>115.775,99</b>	<b>398.556,65</b>
No of trips	0,00	0,00	0,00	0,00	0,00	0,00
Travel cost	7.856,88	940,75	4.686,26	39.584,13	4.622,27	57.690,29
Equipment	589,88	0,00	311,22	0,00	47.000,00	47.901,09
Materials	0,00	0,00	0,00	0,00	0,00	0,00
Other	152,98	605,00	0,00	4.213,32	0,00	4.971,30
<b>(B) Other direct costs</b>	<b>8.599,74</b>	<b>1.545,75</b>	<b>4.997,48</b>	<b>43.797,45</b>	<b>51.622,27</b>	<b>110.562,68</b>
<b>(E) In kind contributions (not used on the premises)</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>
<b>(F) Indirect costs</b>	<b>14.103,24</b>	<b>1.608,87</b>	<b>27.129,39</b>	<b>42.588,77</b>	<b>41.849,57</b>	<b>127.279,83</b>
<b>Subtotal</b>	<b>62.069,45</b>	<b>7.103,58</b>	<b>130.649,47</b>	<b>173.359,73</b>	<b>157.625,56</b>	<b>530.807,79</b>
Audit certificate	0,00	0,00	0,00	0,00	0,00	0,00
Sub-contract	0,00	0,00	0,00	0,00	0,00	0,00
<b>(C) Subcontracting</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>
<b>(D) Financial support 3rd parties</b>	<b>0,00</b>	<b>0,00</b>	<b>0,00</b>	<b>36.250,00</b>	<b>0,00</b>	<b>36.250,00</b>
<b>(H) Total estimated eligible costs</b>	<b>70.516,21</b>	<b>8.044,33</b>	<b>135.646,95</b>	<b>249.193,86</b>	<b>209.247,83</b>	<b>672.649,17</b>
<b>(J) Maximum grant</b>	<b>70.516,21</b>	<b>8.044,33</b>	<b>135.646,95</b>	<b>249.193,86</b>	<b>209.247,83</b>	<b>672.649,17</b>
<b>(K) Requested grant</b>	<b>70.516,21</b>	<b>8.044,33</b>	<b>135.646,95</b>	<b>249.193,86</b>	<b>209.247,83</b>	<b>672.649,17</b>
(worked PM) / (total budgeted PM)	9,83%	1,11%	2,35%	4,51%	6,37%	4,07%
(actual cost) / (total budgeted cost)	6,52%	1,55%	2,58%	4,82%	6,41%	4,20%
"worked PM / actual cost"	1,51	0,72	0,91	0,94	0,99	0,97
1 month linearly budgeted PM	1,83	1,10	15,67	8,94	6,92	34,46
6 month linearly budgeted PM	11,00	6,63	94,00	53,63	41,50	206,75
1 month linear budget personnel cost	€ 15.280	€ 6.579	€ 83.474	€ 54.740	€ 37.601	€ 197.673
6 month linear budget personnel cost	€ 91.680	€ 39.476	€ 500.842	€ 328.438	€ 225.604	€ 1.186.038
(worked PM) / 6 month linear budgeted PM	78,6%	8,9%	18,8%	36,0%	51,0%	32,6%
(actual cost) / (6 month linear budgeted cost)	52,2%	12,4%	20,7%	38,5%	51,3%	33,6%







## WP3

WP 3: Budget	ASTRON	CNRS	INAF	JIVE	UCAM	FAU	IFAE	UCM	INFN	CEA	TOTAL	Totals	
Man months	96,00	236,00	108,00	24,00	132,00	36,00	24,00	24,00	36,00	36,00	752,00	(A) Direct personnel costs	4.006.732
<b>(A) Direct personnel costs</b>	<b>520.000,00</b>	<b>1.258.732,00</b>	<b>540.000,00</b>	<b>120.000,00</b>	<b>760.000,00</b>	<b>240.000,00</b>	<b>120.000,00</b>	<b>88.000,00</b>	<b>180.000,00</b>	<b>180.000,00</b>	<b>4.006.732,00</b>	(C) Subcontracting	340.000
No of trips												(B) Other direct costs	636.000
Travel cost	56.000,00	140.000,00	63.000,00	14.000,00	77.000,00	21.000,00	14.000,00	14.000,00	21.000,00	21.000,00	441.000,00	(D) Financial support 3rd parties	
Equipment												(F) Indirect costs	1.160.683
Materials													
Other		195.000,00									195.000,00	(H) Total estimated eligible costs	6.143.415
<b>(B) Other direct costs</b>	<b>56.000,00</b>	<b>335.000,00</b>	<b>63.000,00</b>	<b>14.000,00</b>	<b>77.000,00</b>	<b>21.000,00</b>	<b>14.000,00</b>	<b>14.000,00</b>	<b>21.000,00</b>	<b>21.000,00</b>	<b>636.000,00</b>	(K) Requested grant	6.143.415
<b>(E) In kind contributions (not used on the premises)</b>													
<b>(F) Indirect costs</b>	<b>144.000,00</b>	<b>398.433,00</b>	<b>150.750,00</b>	<b>33.500,00</b>	<b>209.250,00</b>	<b>65.250,00</b>	<b>33.500,00</b>	<b>25.500,00</b>	<b>50.250,00</b>	<b>50.250,00</b>	<b>1.160.683,00</b>		
<b>Subtotal</b>	<b>720.000,00</b>	<b>1.992.165,00</b>	<b>753.750,00</b>	<b>167.500,00</b>	<b>1.046.250,00</b>	<b>326.250,00</b>	<b>167.500,00</b>	<b>127.500,00</b>	<b>251.250,00</b>	<b>251.250,00</b>	<b>5.803.415,00</b>		
Audit certificate													
Sub-contract		300.000,00						40.000,00			340.000,00		
<b>(C) Subcontracting</b>		<b>300.000,00</b>						<b>40.000,00</b>			<b>340.000,00</b>		
<b>(D) Financial support 3rd parties</b>													
<b>(H) Total estimated eligible costs</b>	<b>720.000,00</b>	<b>2.292.165,00</b>	<b>753.750,00</b>	<b>167.500,00</b>	<b>1.046.250,00</b>	<b>326.250,00</b>	<b>167.500,00</b>	<b>167.500,00</b>	<b>251.250,00</b>	<b>251.250,00</b>	<b>6.143.415,00</b>		
<b>(J) Maximum grant</b>	<b>720.000,00</b>	<b>2.292.165,00</b>	<b>753.750,00</b>	<b>167.500,00</b>	<b>1.046.250,00</b>	<b>326.250,00</b>	<b>167.500,00</b>	<b>167.500,00</b>	<b>251.250,00</b>	<b>251.250,00</b>	<b>6.143.415,00</b>		
<b>(K) Requested grant</b>	<b>720.000,00</b>	<b>2.292.165,00</b>	<b>753.750,00</b>	<b>167.500,00</b>	<b>1.046.250,00</b>	<b>326.250,00</b>	<b>167.500,00</b>	<b>167.500,00</b>	<b>251.250,00</b>	<b>251.250,00</b>	<b>6.143.415,00</b>		
WP 3: Actuals	ASTRON	CNRS	INAF	JIVE	UCAM	FAU	IFAE	UCM	INFN	CEA	TOTAL	Totals	
Man months	9,94	2,5	3,05	1,57				0,6			17,66	(A) Direct personnel costs	103.520
<b>(A) Direct personnel costs</b>	<b>59.002,94</b>	<b>18.300,00</b>	<b>14.386,07</b>	<b>9.311,07</b>				<b>2.520,00</b>			<b>103.520,08</b>	(C) Subcontracting	
No of trips												(B) Other direct costs	4.997
Travel cost		840,00	2.904,86		650,26		291,14				4.686,26	(D) Financial support 3rd parties	
Equipment							311,22				311,22	(F) Indirect costs	27.129
Materials													
Other													
<b>(B) Other direct costs</b>		<b>840,00</b>	<b>2.904,86</b>		<b>650,26</b>		<b>602,36</b>				<b>4.997,48</b>	(H) Total estimated eligible costs	135.647
<b>(E) In kind contributions (not used on the premises)</b>												(K) Requested grant	135.647
<b>(F) Indirect costs</b>	<b>14.750,74</b>	<b>4.785,00</b>	<b>4.322,73</b>	<b>2.327,77</b>	<b>162,57</b>		<b>150,59</b>	<b>630,00</b>			<b>27.129,39</b>		
<b>Subtotal</b>	<b>73.753,68</b>	<b>23.925,00</b>	<b>21.613,66</b>	<b>11.638,84</b>	<b>812,83</b>		<b>752,95</b>	<b>3.150,00</b>			<b>135.646,95</b>		
Audit certificate													
Sub-contract													
<b>(C) Subcontracting</b>													
<b>(D) Financial support 3rd parties</b>													
<b>(H) Total estimated eligible costs</b>	<b>73.753,68</b>	<b>23.925,00</b>	<b>21.613,66</b>	<b>11.638,84</b>	<b>812,83</b>		<b>752,95</b>	<b>3.150,00</b>			<b>135.646,95</b>		
<b>(J) Maximum grant</b>	<b>73.753,68</b>	<b>23.925,00</b>	<b>21.613,66</b>	<b>11.638,84</b>	<b>812,83</b>		<b>752,95</b>	<b>3.150,00</b>			<b>135.646,95</b>		
<b>(K) Requested grant</b>	<b>73.753,68</b>	<b>23.925,00</b>	<b>21.613,66</b>	<b>11.638,84</b>	<b>812,83</b>		<b>752,95</b>	<b>3.150,00</b>			<b>135.646,95</b>		
												Percentage of project time past:	13%
												Financial progress of this work package:	2%
												Progress in person months:	2%

## WP4

WP 4: Budget	ASTRON	CNRS	INAF	INTA	UEDIN	UHEI	TOTAL		Totals	
Man months	42,00	123,00	66,00	66,00	66,00	66,00	429,00		(A) Direct personnel costs	2.627.500
(A) Direct personnel costs	240.000,00	737.500,00	412.500,00	412.500,00	412.500,00	412.500,00	2.627.500,00		(C) Subcontracting	
No of trips									(B) Other direct costs	674.200
Travel cost	53.700,00	224.700,00	80.200,00	137.200,00	80.200,00	80.200,00	656.200,00		(D) Financial support 3rd parties	275.000
Equipment									(F) Indirect costs	825.425
Materials										
Other		3.000,00	3.000,00	6.000,00	3.000,00	3.000,00	18.000,00		(H) Total estimated eligible costs	4.402.125
(B) Other direct costs	53.700,00	227.700,00	83.200,00	143.200,00	83.200,00	83.200,00	674.200,00		(K) Requested grant	4.402.125
(E) In kind contributions (not used on the premises)										
(F) Indirect costs	73.425,00	241.300,00	123.925,00	138.925,00	123.925,00	123.925,00	825.425,00		Observatoire de Paris and Université de Strasbourg are third parties to CNRS	
<b>Subtotal</b>	<b>367.125,00</b>	<b>1.206.500,00</b>	<b>619.625,00</b>	<b>694.625,00</b>	<b>619.625,00</b>	<b>619.625,00</b>	<b>4.127.125,00</b>			
Audit certificate										
Sub-contract										
(C) Subcontracting										
(D) Financial support 3rd parties		275.000,00					275.000,00			
<b>(H) Total estimated eligible costs</b>	<b>367.125,00</b>	<b>1.481.500,00</b>	<b>619.625,00</b>	<b>694.625,00</b>	<b>619.625,00</b>	<b>619.625,00</b>	<b>4.402.125,00</b>			
(J) Maximum grant	367.125,00	1.481.500,00	619.625,00	694.625,00	619.625,00	619.625,00	4.402.125,00			
<b>(K) Requested grant</b>	<b>367.125,00</b>	<b>1.481.500,00</b>	<b>619.625,00</b>	<b>694.625,00</b>	<b>619.625,00</b>	<b>619.625,00</b>	<b>4.402.125,00</b>			
WP 4: Actuals	ASTRON	CNRS	INAF	INTA	UEDIN	UHEI	TOTAL		Totals	
Man months		8,1		0,43	6,8	4	19,33		(A) Direct personnel costs	126.558
(A) Direct personnel costs		54.300,00		2.412,00	50.346,00	19.499,64	126.557,64		(C) Subcontracting	
No of trips									(B) Other direct costs	43.797
Travel cost		9.947,00		14.227,89	5.187,02	10.222,22	39.584,13		(D) Financial support 3rd parties	36.250
Equipment									(F) Indirect costs	42.589
Materials										
Other		2.683,00		360,00		1.170,32	4.213,32		(H) Total estimated eligible costs	249.194
(B) Other direct costs		12.630,00		14.587,89	5.187,02	11.392,54	43.797,45		(K) Requested grant	249.194
(E) In kind contributions (not used on the premises)										
(F) Indirect costs		16.732,50		4.249,97	13.883,26	7.723,05	42.588,77			
<b>Subtotal</b>		<b>83.662,50</b>		<b>21.249,86</b>	<b>69.416,28</b>	<b>38.615,23</b>	<b>212.943,86</b>			
Audit certificate										
Sub-contract										
(C) Subcontracting										
(D) Financial support 3rd parties		36.250,00					36.250,00		Percentage of project time past:	13%
<b>(H) Total estimated eligible costs</b>		<b>119.912,50</b>		<b>21.249,86</b>	<b>69.416,28</b>	<b>38.615,23</b>	<b>249.193,86</b>		Financial progress of this work package:	6%
(J) Maximum grant		119.912,50		21.249,86	69.416,28	38.615,23	249.193,86		Progress in person months:	5%
<b>(K) Requested grant</b>		<b>119.912,50</b>		<b>21.249,86</b>	<b>69.416,28</b>	<b>38.615,23</b>	<b>249.193,86</b>			

WP5

WP 5: Budget	ASTRON	CNRS	JIVE	UGR	FOM	STFC	SURFnet	IEEC	DESY	VU/Umc	UVA	GTD	TOTAL		Totals
Man months	36,00	24,00	72,00	36,00	30,00	12,00	8,00	24,00	18,00	36,00	24,00	12,00	332,00		
(A) Direct personnel costs	219.000,00	96.000,00	408.000,00	150.000,00	175.000,00	90.938,00	64.960,00	79.000,00	108.000,00	213.000,00	125.932,00	75.000,00	1.804.830,00	(A) Direct personnel costs	1.804.830
No of trips	12,00	2,00	24,00	6,00	4,00	2,00	2,00	2,00	2,00	6,00	2,00		64,00	(C) Subcontracting	
Travel cost	5.760,00	960,00	11.520,00	2.880,00	1.920,00	960,00	960,00	960,00	960,00	2.880,00	960,00	960,00	31.680,00	(B) Other direct costs	191.680
Equipment			80.000,00		80.000,00								160.000,00	(D) Financial support 3rd parties	
Materials														(F) Indirect costs	499.128
Other														(H) Total estimated eligible costs	2.495.638
(B) Other direct costs	5.760,00	960,00	91.520,00	2.880,00	81.920,00	960,00	960,00	960,00	960,00	2.880,00	960,00	960,00	191.680,00	(K) Requested grant	2.495.638
(E) In kind contributions (not used on the premises)															
(F) Indirect costs	56.190,00	24.240,00	124.880,00	38.220,00	64.230,00	22.974,50	16.480,00	19.990,00	27.240,00	53.970,00	31.723,00	18.990,00	499.127,50		
Subtotal	280.950,00	121.200,00	624.400,00	191.100,00	321.150,00	114.872,50	82.400,00	99.950,00	136.200,00	269.850,00	158.615,00	94.950,00	2.495.637,50		
Audit certificate															
Sub-contract															
(C) Subcontracting															
(D) Financial support 3rd parties															
(H) Total estimated eligible costs	280.950,00	121.200,00	624.400,00	191.100,00	321.150,00	114.872,50	82.400,00	99.950,00	136.200,00	269.850,00	158.615,00	94.950,00	2.495.637,50		
(J) Maximum grant	280.950,00	121.200,00	624.400,00	191.100,00	321.150,00	114.872,50	82.400,00	99.950,00	136.200,00	269.850,00	158.615,00	94.950,00	2.495.637,50		
(K) Requested grant	280.950,00	121.200,00	624.400,00	191.100,00	321.150,00	114.872,50	82.400,00	99.950,00	136.200,00	269.850,00	158.615,00	94.950,00	2.495.637,50		
WP 5: Actuals	ASTRON	CNRS	JIVE	UGR	FOM	STFC	SURFnet	IEEC	DESY	VU/Umc	UVA	GTD	TOTAL		Totals
Man months	0,09		5,28	4,4	3,51	0,29604	0,373134328			5,8		1,41	21,16		
(A) Direct personnel costs	601,80		32.124,63	18.452,41	21.179,66	1.704,94	3.000,00			30.814,20		7.898,35	115.775,99	(A) Direct personnel costs	115.776
No of trips														(C) Subcontracting	
Travel cost				1.469,19		486,54		656,04		1.527,52		482,98	4.622,27	(B) Other direct costs	51.622
Equipment			47.000,00										47.000,00	(D) Financial support 3rd parties	
Materials														(F) Indirect costs	41.850
Other														(H) Total estimated eligible costs	209.248
(B) Other direct costs			47.000,00	1.469,19		486,54		656,04		1.527,52		482,98	51.622,27	(K) Requested grant	209.248
(E) In kind contributions (not used on the premises)															
(F) Indirect costs	150,45		19.781,16	4.980,40	5.294,92	547,87	750,00	164,01		8.085,43		2.095,33	41.849,57		
Subtotal	752,25		98.905,79	24.902,00	26.474,58	2.739,35	3.750,00	820,05		40.427,15		10.476,66	209.247,83		
Audit certificate															
Sub-contract															
(C) Subcontracting															
(D) Financial support 3rd parties															
(H) Total estimated eligible costs	752,25		98.905,79	24.902,00	26.474,58	2.739,35	3.750,00	820,05		40.427,15		10.476,66	209.247,83		
(J) Maximum grant	752,25		98.905,79	24.902,00	26.474,58	2.739,35	3.750,00	820,05		40.427,15		10.476,66	209.247,83		
(K) Requested grant	752,25		98.905,79	24.902,00	26.474,58	2.739,35	3.750,00	820,05		40.427,15		10.476,66	209.247,83		
														Percentage of project time past:	13%
														Financial progress of this work package:	8%
														Progress in person months:	6%



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